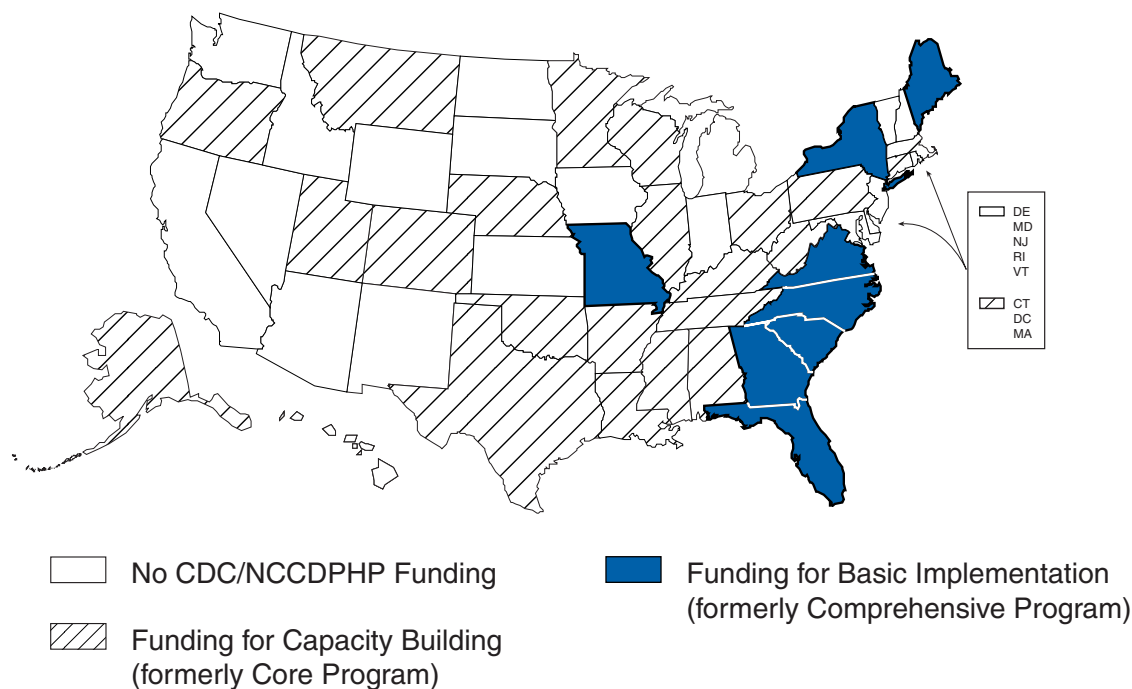


Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers 2003

**CDC Funding for State Cardiovascular Health Programs,
Fiscal Year 2002**



"We have the scientific knowledge to create a world in which most cardiovascular disease could be eliminated."

The Victoria Declaration on Heart Health

Heart Disease and Stroke: The Nation's Leading Killers

The Burden of Heart Disease and Stroke

Heart disease and stroke—the principal components of cardiovascular disease—are the first and third leading causes of death in the United States, accounting for nearly 40% of all deaths. About 950,000 Americans die of cardiovascular disease each year, which amounts to one death every 33 seconds.

Many people believe that heart disease and stroke primarily affect men and older people, but they are the leading causes of death for both men and women. Although these largely preventable conditions are more common among people aged 65 years and older, the number of sudden deaths from heart disease among people aged 15–34 has increased.

Moreover, deaths are only part of the picture. About 61 million Americans (almost one-fourth of the population) live with cardiovascular disease. Coronary heart disease is a leading cause of premature, permanent disability in the U.S. workforce. Stroke alone accounts for disability among more than 1 million Americans. Almost 6 million hospitalizations each year are due to cardiovascular disease.

The economic impact of cardiovascular disease on the U.S. health care system continues to grow as the population ages. The cost of heart disease and stroke in the United States is projected to be \$351 billion in 2003, including health care expenditures and lost productivity from death and disability.

Risk Factors Must Be Addressed

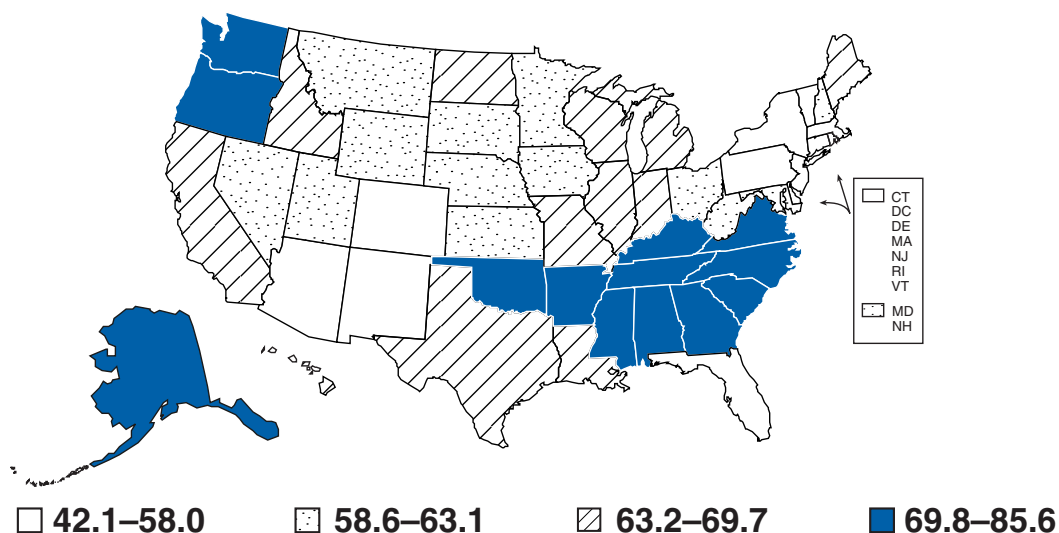
Two of the major independent risk factors for cardiovascular disease are high blood pressure and high blood cholesterol. About 90% of middle-aged Americans will develop high blood pressure in their lifetime, and nearly 70% of people with high blood pressure do not have it under control.

A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. For example, health care practitioners should be encouraged to follow the current guidelines (e.g., prescribing beta-blockers and aspirin as appropriate) for treating patients with or at risk for cardiovascular disease.

People also need to be educated about the signs and symptoms of heart attacks and stroke and the importance of calling 911 quickly. Nearly 70% of deaths from heart disease occur before a person can be admitted to a hospital, and about 48% of stroke victims die before emergency medical personnel arrive.

Other important ways that people can reduce their risk for heart disease and stroke are to avoid using tobacco, adopt healthier diets, and be physically active. Using tobacco directly affects people's risk for heart disease and stroke, and poor nutrition and physical inactivity increase risk by adversely affecting blood pressure and blood cholesterol levels.

Rates of Death Due to Stroke,* 1999



*Deaths per 100,000, age adjusted to 2000 total U.S. population.

CDC's National Leadership

Establishing a Nationwide Prevention Program

In 1998, Congress funded CDC to launch a nationwide effort to help states develop the capacity, commitment, and resources necessary for a comprehensive program to prevent death and disability from heart disease and stroke and to improve the cardiovascular health of all Americans. With fiscal year 2002 appropriations of \$37 million for this program,* CDC funded 29 states and the District of Columbia (8 for basic implementation and 22 at a lower capacity-building level). Program priorities include the following:

- Prevent and control high blood pressure and high blood cholesterol levels.
- Improve quality of care to prevent and manage high blood pressure, stroke, and heart disease.
- Get people to appropriate emergency care quickly.
- Eliminate health disparities (e.g., based on geography, gender, race or ethnicity, or income).
- Promote heart health in a variety of settings (health care facilities, work sites, schools, and communities) through education and policy and environmental changes.

Working with its partner organizations, CDC provides national leadership to help achieve the *Healthy People 2010* objectives to prevent heart disease and stroke, increase quality and years of healthy life, and eliminate health disparities. CDC's leadership is evident through its many activities and programs, including development of a broad public health action plan to prevent heart disease and stroke, collection of vital data to track these conditions, and support of state-based programs.

Developing an Action Plan

CDC has coordinated the development of *A Public Health Action Plan to Prevent Heart Disease and Stroke*. More than 100 participants came together to support this process. The plan charts a course for CDC and collaborating public health agencies to work with all interested parties to help prevent heart disease and stroke over the next two decades and beyond.

This *Action Plan* represents a comprehensive public health strategy to improve cardiovascular health through the prevention, detection, and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent events. CDC is committed to providing the leadership and support needed to implement this plan.

Collecting Vital Information Through Surveillance

As part of its national leadership, CDC supports and conducts the surveillance necessary to build a strong foundation of science for preventing heart disease and stroke. For example, the recently released *Atlas of Stroke Mortality: Racial, Ethnic, and Geographic Disparities in the United States* presents detailed national and state maps with county-level data of local disparities in stroke death rates for the nation's five largest racial and ethnic groups.

Through the CDC-supported Behavioral Risk Factor Surveillance System (BRFSS), all states, the District of Columbia, and three U.S. territories collect information from adults on their knowledge, attitudes, and behaviors related to key health issues, including their knowledge of the signs and symptoms of heart attack and stroke and their access to and use of cardiovascular health care services. States use these data to track critical health problems and to develop and evaluate public health programs.

CDC also supports the Youth Risk Behavior Surveillance System (YRBSS), which collects information on risk behaviors among young people that can contribute to their risk of developing cardiovascular disease.

To improve hospitals' delivery of the critical emergency care that can prevent permanent disabilities from stroke, CDC established the Paul Coverdell National Acute Stroke Registry in 2001 by funding four sites to design and test prototypes to measure the delivery of acute care for stroke. In 2002, CDC expanded funding to an additional four sites in different geographic regions. All eight sites are developing prototypes for statewide, hospital-based registries.

*Fiscal year 2003 appropriations were not available at the time of printing.

State Programs and Key Partnerships

State Heart Disease and Stroke Prevention Programs

With support from CDC, states are conducting a range of activities to reduce the burden of heart disease and stroke, including the following:

- Developing campaigns that educate people about the signs and symptoms of heart attack and stroke and the importance of calling 911 for immediate medical care.
- As part of the National Health Disparities Collaborative, partnering with health care centers to help them better manage high blood pressure among underserved populations.
- Promoting changes in the health care system needed to implement prevention guidelines.
- Helping work sites establish policies and environments that support cardiovascular health.
- Collaborating with educational partners to promote school policies and environments that support cardiovascular health.

Collaborations Are Key to Success

CDC works with partners both inside and beyond the health sector to address the *Healthy People 2010* objectives for preventing heart disease and stroke. Partners include other federal agencies (e.g., Centers for Medicare and Medicaid Services, National Institutes of Health), national health organizations (e.g., American Heart Association/American Stroke Association, National Stroke Association), and professional groups (e.g., American College of Cardiology).

Future Challenges and Directions

CDC's State Heart Disease and Stroke Prevention Program will continue its work to prevent death and disability from heart attack and stroke and to eliminate disparities in health and in the delivery of health care

services. These efforts include promoting policy and environmental changes such as universal 911 coverage. CDC will also continue to increase the number of states that are funded to develop and implement heart disease and stroke prevention programs until every American is served by a state, territorial, or tribal program.

State Programs in Action

- **The Virginia Cardiovascular Health Program** is helping federally funded health care centers educate their staff on high blood pressure control. It also works with the American Heart Association to increase young African Americans' awareness of ways to control high blood pressure.
- **The Tri-State Stroke Network** includes representatives from state cardiovascular health programs in Georgia, South Carolina, and North Carolina. This network is increasing public awareness of stroke symptoms and the need to treat stroke as a medical emergency.
- **The Maine Cardiovascular Health Program** is teaching partners and managed care organizations how to improve quality of care to better prevent and manage cardiovascular disease, with an emphasis on high blood pressure.
- **The Oregon Cardiovascular Health Program** has studied the prevalence of major risk factors for cardiovascular disease, including high blood pressure and high blood cholesterol, among Medicaid-eligible residents. The study found that cardiovascular disease risk factors and related hospitalizations are more common among the state's Medicaid population than among the general population. This information is being used to guide program activities.

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